HIGHLIGHTS

For more than 35 years, EPA has been working to reduce pollution and make the nation's air cleaner and healthier to breathe. This summary report highlights the agency's most recent evaluation of status and trends in our nation's air quality.

LEVELS OF SIX PRINCIPAL POLLUTANTS CONTINUE TO DECLINE

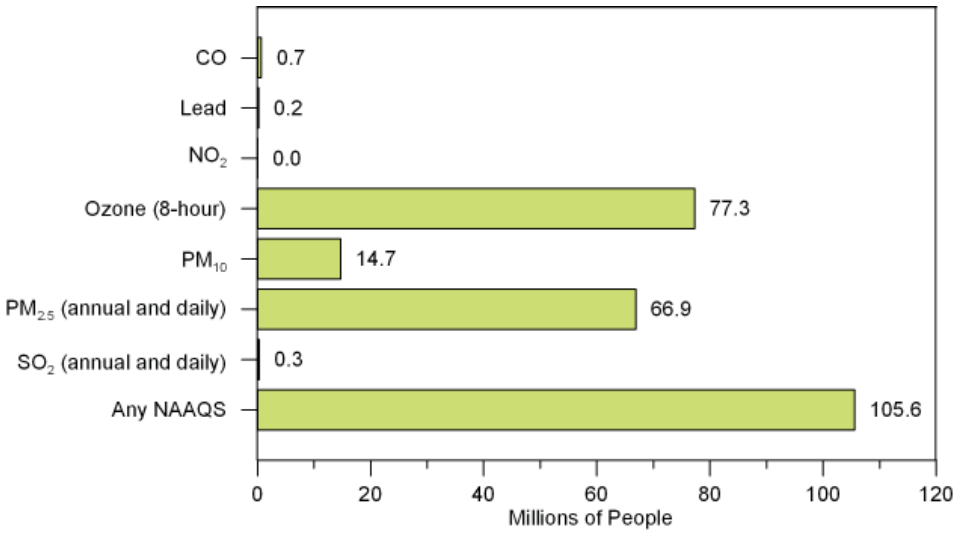
- Cleaner cars, industries, and consumer products have contributed to cleaner air for much of the United States. Since 1980, nationwide air quality, measured at more than a thousand locations across the country, has improved significantly for all six principal pollutants. These common pollutants are ground-level ozone, particle pollution, nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead.
- Despite this progress, ground-level ozone and fine particle pollution ($PM_{2.5}$) continue to present challenges in many areas of the country. Ozone and fine particle levels are continuing to decline. In 2006, 8-hour ozone concentrations were 9 percent lower than in 1990, and annual $PM_{2.5}$ concentrations were 14 percent lower than in the year 2000. But that same year, more than 100 million people lived in counties that exceeded national air quality standards for ozone or $PM_{2.5}$.

AIR TOXICS: MONITORING EXPANDS, BENZENE LEVELS DROP

- Twenty-three National Air Toxics Trends Stations (NATTS) are now fully operational, adding a consistent national network to the existing state and local monitors for toxic air pollutants.
- Benzene, a primary contributor to the cancer risk associated with air toxics exposure, is one of the most routinely and accurately monitored air toxics across the country. Benzene levels in the outdoor air declined about 17 percent between 2000 and 2005.
- Control programs for mobile sources and facilities such as chemical plants, dry cleaners, coke ovens, and incinerators were primarily responsible for reductions of roughly 35 percent in air toxics *emissions* between 1990 and 2002.

ACID RAIN AND HAZE DECLINING

- EPA's Acid Rain Program continues to contribute to significant improvements in air quality and environmental health. The program's reductions in sulfur dioxide and nitrogen oxides have led to significant decreases in acid rain, contributing to improved water quality in lakes and streams. For example, between the 1989-1991 and 2004-2006 time periods, sulfate deposition decreased more than 30 percent in the Northeast and Midwest.



Number of people living in counties with air quality concentrations above the level of the primary National Ambient Air Quality Standards (NAAQS) in 2006.

Note: Multiple years of data are generally used to determine if an area attains the national standards. The chart above is for one year only.

- Visibility in scenic areas, which can be impaired by particles and gases in the air, has improved throughout the country. Only one location—Petrified Forest, Ariz.—shows degradation in visibility for the worst visibility days between 1996 and 2005.

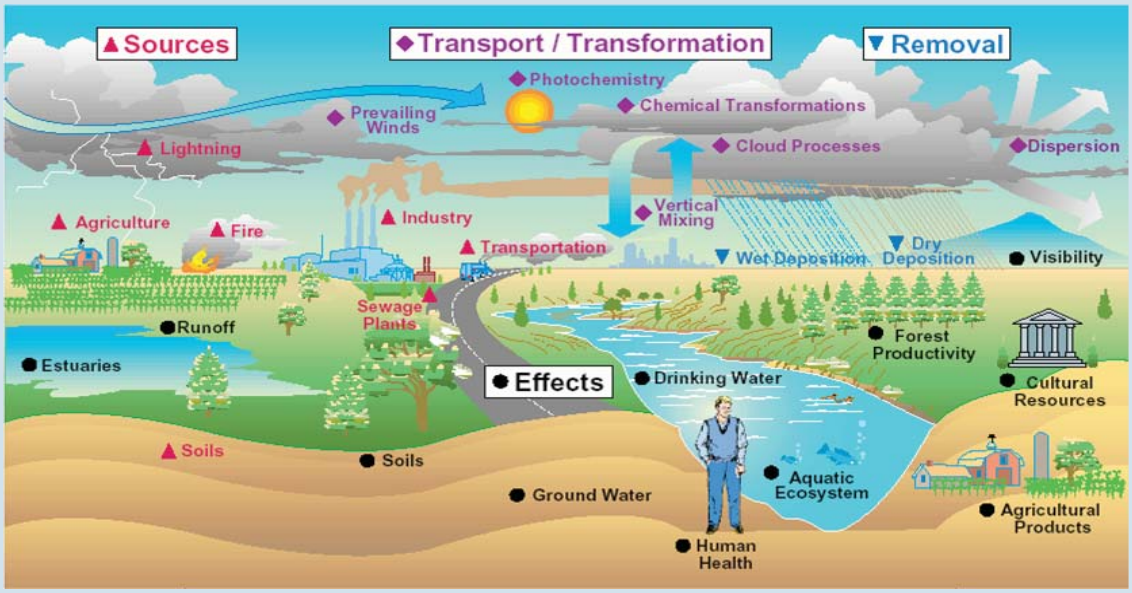
CLIMATE AND INTERNATIONAL TRANSPORT: IMPROVING OUR UNDERSTANDING

- Research is under way to examine and improve our understanding of the links between air quality and climate: how air quality affects climate and how a warming climate could affect air quality.
- Researchers also are improving our understanding about how pollution moves – not just within North America, but also between continents.

MORE IMPROVEMENTS ANTICIPATED

- EPA expects the air quality to continue to improve as recent regulations are fully implemented and states work to meet national ambient air quality standards. Among these rules are: the Clean Air Interstate Rule, the Clean Air Mercury Rule, the Tier II Vehicle and Gasoline Sulfur Program, the Heavy-Duty Highway Diesel Rule, the Clean Air Nonroad Diesel Rule, and the Mobile Source Air Toxics Rule.

Air Pollution Pathways



The interrelationships among pollutants, sources, transport and transformation pathways, and environmental effects are complex. For example,

- *Emissions from various sources contribute to ozone, particle pollution, and acid rain formation in the atmosphere.*
- *The photochemistry involved to form these pollutants is enhanced by sunlight.*
- *Fires contribute to the build-up of particle pollution.*
- *Winds disperse and transport pollution over large distances.*
- *Rain washes particles out of the atmosphere into streams and lakes.*

These processes and interrelationships create many pathways and feedback systems through which human health and ecosystems are affected.

(Source: Adapted from National Science and Technology Council Committee on Environment and Natural Resources, Air Quality Research Subcommittee, 1999)